

REMARKS

Claims 1-21 are pending in the application and are rejected. Claims 1-3, 8, 9, 11, 12, 18 and 21 are amended herein.

The drawings are objected to on the ground that they do not contain every feature recited in the claims. In particular, the examiner contends that the “control input,” the “temperature sensing circuit,” the “timing circuit,” the “RC circuit” and the “capacitive discharge circuit” are not shown. The objections are respectively traversed.

The “control input” recited in claims 1, 8 and 18 is the gate terminal of the MOSFET switch 16. In order to clarify this point, the specification has been amended at page 4 to recite the “gate or control input terminal” of the MOSFET switch. The “temperature sensing circuit” is the thermal switch 33 (see page 6, lines 5-10). The “timing circuit” comprises the elements 23-28 and 30-34 (see page 3, antepenultimate line - page 4, line 7). The “RC circuit” includes the elements 23-28 (see page 5, line 20-page 6, line 2). The “capacitive discharge” includes the elements 30-34 (see page 6, lines 1-2).

The examiner has also objected to the drawings for failing to show the “timing circuit (22).” The drawing figure has been amended to add the reference numeral “22” (see the enclosed Marked Up Sheet and Replacement Sheet).

The claims have been objected to as containing certain enumerated informalities. Claims 2, 3, 9, 11 and 21 have been amended to correct these informalities, with the exception of the alleged informality noted at claim 4, line 1. In this latter regard, the examiner contends that “the circuitry” should be changed to --the control circuit--. Claim 4 depends from claim 2 and recites details of “the circuitry for altering impedance,” antecedent basis for the quoted language being found in claim 2. Accordingly, it is believed that claim 4 is clear and definite, as written.

Claim 12 is amended to correct a typographical error.

Claims 10-21 are rejected under 35 U.S.C. § 102 or 103 as being anticipated by or unpatentable over U.S. patent no. 6,198,234 to Henry. In support of the rejection, the examiner contends that Henry discloses in Fig. 4 a drive circuit 800 which includes an electronic switch (804, 806) “connected in series” with the lamp 5 and a PWM control circuit which includes a “temperature-sensing circuit.” For the latter feature, the examiner refers to column 8, lines 18 and 54 and column 18, line 23 of the reference. The rejections are respectfully traversed.

First, the electronic switch (804, 806) of Henry is not connected “in series” with the Henry lamp 850, as required by applicants’ claims. Rather, the Henry switch is inductively coupled through a transformer to the lamp.

More importantly, while Henry discloses temperature-responsive control of his lamp (see column 3, lines 52-65), and further discloses PWM-controlled dimming of the lamp (see Fig. 4 and description thereof), it **does not** disclose or suggest temperature-responsive control of PWM duty cycle, as required by the rejected claims. The only discussion of temperature-responsive feedback control is in connection with Figs. 1-3A. The exact manner in which temperature responsive control is effected in the embodiment of Fig. 1 is not spelled out, but there is no mention of pulse width modulation. Fig. 4 discloses an embodiment wherein PWM control is effected by voltage and current feedback signals for performing a dimming operation. There is no mention of temperature sensing in connection with the embodiment of Fig. 4. The PWM control circuit of Fig. 4 includes neither a temperature-sensing element nor any type of temperature feedback signal. Thus, Henry does not disclose temperature-responsive control of a PWM duty cycle as required by applicants’ claims. Accordingly, it is believed that, as amended,

each of claims 1-21 patentably distinguishes from the cited art and, accordingly, allowance of those claims is respectfully asked.

Respectfully submitted,

Seyfarth Shaw LLP
Attorneys for Assignee
55 East Monroe Street
Suite 4200
Chicago, Illinois 60603-5803
312-346-8000

By 

Harold V. Stotland, Reg. No. 24,492

